```java
import java.util * scanner;
class student
{
    string name;
    string usn;
    int credits [] = new int [5];
    int marks [] = new int [5]
    double sgpa = 0.0;
    double cgpa = 0;
    int grade [] = new int [5];
    double calculate (int m[] , int c [])
    {
        int j;
        double sum = 0.0;
        int div = 0;
        for (j=0; j<5; j++)
        {
            if (m[j] >= 100)
            {
                grade [j] = 10;
            }
            div = credits [j] + div;
            sum = sum + (grade [j] * credits [j]);
            System.out.println (" grade of subject "+ (j+1) + " :
                            grade[j] );
        }
        sgpa = sum / div;
        System.out.println (" SGPA "+ sgpa);
        return sgpa;
    }
    double calcgpa (double sgpa 1, double sgpa 2)
    {
        cgpa= (sgpa 1 + sgpa 2) / 2
        return cgpa; }
```

```java
Void input ()
{
Scanner sc = new scanner (system.in)
System.out.println ("Now enter subject credits for semester 4);
int i;
for (i = 0; i < 5; i++ )
{
credits [i] = sc.nextInt () ;
}
System.out.println ("Now enter subject marks for semester :4)
for (i = 0; i < 5; i++ )
{
mark [i] = sc.nextInt ();
}
}
Public static Void main (string args [])  {
    Scanner sc1 = new Scanner (system.in );
    System.out.println ("Enter number of students : " );
    int n = sc1.nextInt ();
    Student obj [s] = new student [n];
    int k;
    for (k = 0; k < n; k++ )
    {
    obj [k] = new Student ();
    System.out.println ("enter student name " );
    name = sc1.nextLine ();
    obj [k] = input ();
    System.out.println (" semester 1 " );
    double result = obj[k].calculate (obj [k].marks,
         obj[k].credits );
    System.out.println ("1st semester SGPA for " +
              obj [k].name + " ( " + obj [k].usn
```

```
System.out.println ("semester 2 ");
obj [k].input ();
double result 2= obj [k].calculate (obj [k].marks,
    obj [k].credits);
System.out.println ("2nd semester SGPA for " + "
                    obj [k].usn + "") is: " + re
System.out.println (cGPA for 1st year is:
                "+ obj [k].usn") YS, result
                        cal cgpa (result
    }
    }
}
```

```
Obj [k] = new studen ();
System.out.println ("Enter student name: ");
String name = sc.next ();
System.out.println (" Enter student name :"         USN:");
String usn = sc.next ();
```

Output:

Enter name :

abhi

Enter USN :

123456

Now enter subject credits for semester

3

3

3

3

3

3

3

3

Now enter marks for each semester,

100

100

100

100

100

100

100

100

Semester 1

Grade for subject 1 : 10

Grade for subject 2 : 10

Grade for subject 3 : 10

Grade for subject 4 : 10

Grade for subject 5 : 10

Grade for subject 6 : 10

Grade for subject 7 : 10

Grade for subject 8 : 10

1st semester SGPA is 10.

Semester 2.

Now ents of subjects credits for semester

3

3

3

3

3

3

3

3

Now enter marks for each semester

100

100

100

100

100

100

100

100

Semester 2

Grade for subject1 : 10

Grade for subject2 :10

Grade for subject3 : 10

grade for Subject 4 : 10

Grade for Subject 5 : 10

grade for subject 6 : 10

grade for Subject 7 : 10

Grade for Subject 8 : 10

2nd Semester SGPA is 10.

CGPA for 1st year is 10.00.